

Cirrus 2

Atmospheric Pressure Gas Monitoring

High throughput with six fully independent analysis stations

- Perform temperature-programmed reactions
- Pulse micro reactions
- Temperature-programmed decompositions

Easy to use interface for MS startup, calibration, and analysis

- Simple menu-driven interface to reduce start-up time
- Mass scale tuning
- Triggered data acquisition for flexible and reliable external hardware control
- Supports unattended operation on automatic data collection for sequenced analyses

Data integration with AutoChem II 2920 and AutoChem 2950 HP

- MS data may be analyzed using the Micromeritics Peak Editor that allows signal deconvolution (peak fitting), signal integration, and smoothing
- The AutoChem software may be used to create MS calibrations and convert raw signals to quantitative analyses

Data may be used directly in AutoChem characterization reports: dispersion, active area, kinetics, crystallite size.



Quadrupole Mass Spectrometer, 200 AMU

Catalog Numbers:

Stand Alone Unit	292-33015-01
ASAP 2920	292-33015-00
ASAP 2950	295-33015-00

Training:

U.S.A. / Canada	292-46101-00
E.U.	292-46102-00
China / Asia / Other Countries	292-46103-00

Cirrus 2 offers the versatility of state-of-the-art Microvision 2 quadrupole mass spectrometry in a convenient bench-top configuration. Incorporating an Ethernet interface, Cirrus 2 systems may be operated from a local PC or connected directly to an Ethernet network hub or switch for remote operation.

Cirrus 2 systems are ideal for on-line monitoring and analysis of gases and gas mixtures including trace contaminants in process gases, solvent vapors, hydrocarbons, atmospheric and inorganic gas species (including corrosives), freons, and noble gases.

Gas compositions can be tracked over a wide dynamic range (ppb to percentage levels) with a speed of up to 250 data points per second. The heated silica capillary inlet ensures a rapid response to changes in gas composition.

[Link to Cirrus 2 webpage](#)

Specifications

Physical

Length:	645mm (25.39 in.)
Width:	410mm (16.14 in.)
Height:	350mm (13.77 in.)
Weight:	34.5 Kg (76.05 lbs)

Electronics

1 to 100, 200 or 300 amu or 1 to 6 high-resolution options

Detection Limits

Gas-dependent, typically <100 ppb for non-interfering species

Electron Energy & Emission Current

Operator variable

Maximum Operating Temperature

35 °C (96 °F), 80% RH (non-condensing) (Turbo pump & electronics)

Oven Temperature

180 °C (356 °F) for bake-out, 80 °C (176 °F) for operation at elevated temperatures
(Vacuum chamber & inlet interface)

Capillary Inlet

2.0 m long with ¼ in. Swagelok®-end connection, heated to 150 °C (356 °F) (optional heating to 300 °C (572 °F)).
Standard Flexil™ and optional stainless steel.

Gas Consumption

20 mL/min, lower uptake rate capillaries options are available

Sample Pressure

1 bar nominal

Pumping System

- High compression turbo molecular pump
- 4-stage diaphragm backing pump standard, corrosive gas pumping with all internal pumps optional

Multi-stream Inlet

4-, 8-, or 16-way multi-stream inlet with option to continuously pump all streams for faster response times (requires all gas streams to be chemically compatible)

Automated Inlet Pressure Controller

A Baratron-based, automated inlet pressure controller is available as an option

Power

- Universal mains input: 90 – 264 VAC, 44 – 66 Hz
- Maximum power consumption: 800 W (during bake-out)

In keeping with the policy of ongoing improvements, specifications are subject to change without notice